

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	0	barrier with (silane or ammonia) with (hydride adj gas)	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/12/29 11:00
L5	64	barrier and (silane or ammonia) and (hydride adj gas)	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/12/29 09:41
L6	44	5 and semiconductor	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/12/29 11:01
L7	39	6 and @ad<="20010417"	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/12/29 11:01
L8	38	7 and metal	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/12/29 11:01
L9	3	barrier same (silane or ammonia) same (hydride adj gas)	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/12/29 11:00
L10	3	9 and semiconductor	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/12/29 11:01
L11	3	10 and @ad<="20010417"	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/12/29 11:01
L12	3	11 and metal	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/12/29 11:01
S1	184	barrier same copper same anneal\$6 same (reducing or (forming adj gas) or ammonia or nitrogen or ("nh.sub.3") or ("n.sub.2"))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/07/22 08:16
S2	94	(barrier same copper same anneal\$6 same (reducing or (forming adj gas) or ammonia or nitrogen or ("nh.sub.3") or ("n.sub.2"))) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/07/22 08:16
S3	2	((("6143647") or ("5821168")).PN.	USPAT; USOCR	OR	OFF	2004/07/22 09:35
S4	1	("6146468").PN.	USPAT; USOCR	OR	OFF	2004/07/22 10:21
S5	833	438/618	USPAT; EPO; JPO; DERWENT	OR	OFF	2003/03/10 10:42
S6	672	438/633	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/17 14:40

S7	45384	barrier adj (layer or film)	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:06
S8	1055	(barrier adj (layer or film)) and (reduc\$4 adj (gas or agent or chemical))	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/03/02 08:58
S9	237	((barrier adj (layer or film)) and (reduc\$4 adj (gas or agent or chemical))) and (metal adj (film or layer))	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 08:17
S10	5	(barrier adj (layer or film)) and (first adj reduc\$4 adj (gas or agent or chemical))	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/17 14:56
S11	0	((barrier adj (layer or film)) and (first adj reduc\$4 adj (gas or agent or chemical))) and (metal adj (film or layer))	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/17 14:53
S12	0	((barrier adj (layer or film)) and (reduc\$4 adj (gas or agent or chemical))) and (metal adj (film or layer))) and (second adj reduc\$4 adj (gas or agent or chemical))	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/17 14:55
S13	237	((barrier adj (layer or film)) and (reduc\$4 adj (gas or agent or chemical))) and (metal adj (film or layer))) and (reduc\$4 adj (gas or agent or chemical))	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/12/29 09:39
S14	163	(first adj reduc\$4 adj (gas or agent or chemical))	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/17 14:58
S15	92	((first adj reduc\$4 adj (gas or agent or chemical))) and (second adj reduc\$4 adj (gas or agent or chemical))	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/17 15:01
S16	6	((first adj reduc\$4 adj (gas or agent or chemical))) and (second adj reduc\$4 adj (gas or agent or chemical))) and semiconductor	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/17 15:01
S17	683	438/627	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/17 15:31
S18	1178	438/643	USPAT; EPO; JPO; DERWENT	OR	OFF	2002/01/02 14:19
S19	20851	((diffus\$6 adj barrier) or prevent\$10) adj (layer or film))	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:01

S20	394	(((((diffus\$6 adj barrier) or prevent\$10) adj (layer or film))) and (reduc\$4 adj (gas or agent or chemical)))	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 08:17
S21	96	(((((diffus\$6 adj barrier) or prevent\$10) adj (layer or film))) and (reduc\$4 adj (gas or agent or chemical))) and (metal adj (film or layer))	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 12:54
S22	20851	((diffus\$6 adj barrier) or prevent\$10) adj (layer or film))	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:02
S23	3447	((diffus\$6 adj barrier) or (diffus\$6 adj prevent\$10)) adj (layer or film))	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:04
S24	40	(((((diffus\$6 adj barrier) or prevent\$10) adj (layer or film)))) and (first adj anneal\$5)	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:07
S25	0	(((((diffus\$6 adj barrier) or prevent\$10) adj (layer or film)))) and (first adj anneal\$5)) and (second adj aneal\$5)	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:08
S26	45418	barrier adj (layer or film)	USPAT; EPO; JPO; DERWENT	OR	OFF	2003/03/07 13:53
S27	147	(barrier adj (layer or film)) and (first adj anneal\$5)	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:08
S28	0	((barrier adj (layer or film)) and (first adj anneal\$5)) and (second adj aneal\$5)	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:21
S29	483098	plug or interconnection	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:23
S30	108014	metal adj (layer or film)	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:24
S31	18975	(metal adj (layer or film)) and (plug or interconnect\$5)	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:25
S32	3544	((metal adj (layer or film)) and (plug or interconnect\$5)) and anneal\$5	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:25
S33	56	((metal adj (layer or film)) and (plug or interconnect\$5)) and anneal\$5 and (reduc\$3 adj atmosphere)	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:30
S34	6	((barrier adj (layer or film)) and (first adj anneal\$5)) and (reduc\$3 adj atmosphere)	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:31

S35	40	(((((metal adj (layer or film))) and (plug or interconnect\$5)) and anneal\$5) and (reduc\$3 adj atmosphere)) and semiconductor	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:37
S36	6	((((barrier adj (layer or film)) and (first adj anneal\$5)) and (reduc\$3 adj atmosphere)) and semiconductor	USPAT; EPO; JPO; DERWENT	OR	OFF	2001/12/18 14:36
S37	5	((("5116463") or ("6207222") or ("6197688") or ("6191031") or ("6143646")).PN.	USPAT; USOCR	OR	OFF	2004/07/22 09:35
S38	562	438/687	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/02/20 13:52
S39	55733	barrier adj (layer or film)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/10 07:56
S40	489	(barrier adj (layer or film)) and (reduc\$3 adj (gas or ambient))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:01
S41	160	((barrier adj (layer or film)) and (reduc\$3 adj (gas or ambient))) and (metal adj (layer or film))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:03
S42	3	((((barrier adj (layer or film)) and (reduc\$3 adj (gas or ambient))) and (metal adj (layer or film))) and (second adj (gas or ambient))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:08
S43	222	(barrier adj (layer or film)) and (reduc\$3 adj (gas or ambient)) and plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:05
S44	3	(((((barrier adj (layer or film)) and (reduc\$3 adj (gas or ambient))) and (metal adj (layer or film))) and (second adj (gas or ambient))) and plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 13:59
S45	113	((((barrier adj (layer or film)) and (reduc\$3 adj (gas or ambient))) and (metal adj (layer or film))) and plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:06

S46	28226	(barrier adj (layer or film)) and (reduc\$3 or (hygrogen or ("H.sub. 2"))) adj (gas or ambient))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:03
S47	6490	((barrier adj (layer or film)) and (reduc\$3 or (hygrogen or ("H.sub. 2"))) adj (gas or ambient))) and (metal adj (layer or film))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:05
S48	222	((barrier adj (layer or film)) and (reduc\$3 or (hygrogen or ("H.sub. 2"))) adj (gas or ambient))) and (reduc\$3 adj (gas or ambient)) and plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:07
S49	8105	((barrier adj (layer or film)) and (reduc\$3 or (hygrogen or ("H.sub. 2"))) adj (gas or ambient))) and plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:07
S50	3403	((((barrier adj (layer or film)) and (reduc\$3 or (hygrogen or ("H.sub. 2"))) adj (gas or ambient))) and (metal adj (layer or film))) and plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:07
S51	99	((((barrier adj (layer or film)) and (reduc\$3 or (hygrogen or ("H.sub. 2"))) adj (gas or ambient))) and (metal adj (layer or film))) and (second adj (gas or ambient))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:07
S52	99	(((((barrier adj (layer or film)) and (reduc\$3 or (hygrogen or ("H.sub. 2"))) adj (gas or ambient))) and (metal adj (layer or film))) and (second adj (gas or ambient))) and (second adj (gas or ambient))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:10
S53	92	(((((barrier adj (layer or film)) and (reduc\$3 or (hygrogen or ("H.sub. 2"))) adj (gas or ambient))) and (metal adj (layer or film))) and (second adj (gas or ambient))) and (second adj (gas or ambient))) and semiconductor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2003/03/07 14:10
S54	25099	barrier adj (layer or film)	USPAT	OR	OFF	2003/03/10 07:56
S55	7320	(barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))	USPAT	OR	OFF	2003/03/10 08:01

S56	3856	((barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))) and semiconductor	USPAT	OR	OFF	2003/03/10 08:02
S57	1694	((barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))) and semiconductor) and (metal adj (layer or film))	USPAT	OR	OFF	2003/03/10 08:03
S58	303	((barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))) and semiconductor) and ((metal adj (layer or film)) same (chemical adj vapor adj deposition))	USPAT	OR	OFF	2003/03/10 08:04
S59	60	((barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))) and semiconductor) and (metal adj (layer or film)) and (second adj gas)	USPAT	OR	OFF	2003/03/10 08:05
S60	9	((barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))) and semiconductor) and ((metal adj (layer or film)) same (chemical adj vapor adj deposition))) and (second adj gas)	USPAT	OR	OFF	2004/02/20 13:52
S61	2	("5665659") or ("5953634")).PN.	USPAT; USOCR	OR	OFF	2004/02/23 09:53
S62	1	("6475902").PN.	USPAT; USOCR	OR	OFF	2004/07/22 10:21
S63	1	("20020009872").PN.	US-PGPUB; USOCR	OR	OFF	2004/12/29 09:35
S64	3	("20020022354") or ("6248633") or ("6303959")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2003/11/17 06:46
S65	10	((barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))) and semiconductor) and ((metal adj (layer or film)) same (chemical adj vapor adj deposition))) and (second adj gas)	USPAT	OR	OFF	2004/02/20 13:53

S66	1661	438/687	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/02/20 13:52
S67	1884	438/618	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/02/20 13:52
S68	1281	438/633	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/02/20 13:52
S69	1407	438/627	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/02/20 13:53
S70	1772	438/643	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/02/20 13:53
S71	1661	438/687	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/02/20 13:53
S72	2	438/687,618,633,627,643,687. CCLS. and (((barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))) and semiconductor) and ((metal adj (layer or film)) same (chemical adj vapor adj deposition))) and (second adj gas) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/03/02 13:03
S73	8	"438"/\$.CCLS. and (((barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))) and semiconductor) and ((metal adj (layer or film)) same (chemical adj vapor adj deposition))) and (second adj gas) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/02/20 13:58

S74	8	"257"/\$.CCLS. and (((barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))) and semiconductor) and ((metal adj (layer or film)) same (chemical adj vapor adj deposition))) and (second adj gas) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/02/20 13:59
S75	11	(((barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))) and semiconductor) and ((metal adj (layer or film)) same (chemical adj vapor adj deposition))) and (second adj gas) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/02/20 13:59
S76	5	("5139825" "5178911" "5856236" "5900498" "5908947").PN.	USPAT	OR	ON	2004/02/23 08:02
S77	2508	(barrier adj (layer or film)) and (reduc\$4) and (metal adj (layer or film)) and (treat\$6 or ((post adj treat\$6) or (post-treat\$6) or (posttreat\$6)))	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/03/02 09:01
S78	2198	(barrier adj (layer or film)) and (reduc\$4) and (metal adj (layer or film)) and (treat\$6 or ((post adj treat\$6) or (post-treat\$6) or (posttreat\$6))) and @ad<="20010417"	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/03/02 09:02
S79	1612	semiconductor and (barrier adj (layer or film)) and (reduc\$4) and (metal adj (layer or film)) and (treat\$6 or ((post adj treat\$6) or (post-treat\$6) or (posttreat\$6))) and @ad<="20010417"	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/03/02 09:12
S80	1416	(semiconductor and (barrier adj (layer or film)) and (reduc\$4) and (metal adj (layer or film)) and (treat\$6 or ((post adj treat\$6) or (post-treat\$6) or (posttreat\$6))) and @ad<="20010417") and expos\$6	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/03/02 09:13
S81	1416	((semiconductor and (barrier adj (layer or film)) and (reduc\$4) and (metal adj (layer or film)) and (treat\$6 or ((post adj treat\$6) or (post-treat\$6) or (posttreat\$6))) and @ad<="20010417") and expos\$6) and reduc\$6	USPAT; EPO; JPO; DERWENT	OR	OFF	2004/03/02 09:15
S82	1	("5,953,634").PN.	USPAT; USOCR	OR	OFF	2004/03/02 12:53

S83	1	("5,665,659").PN.	USPAT; USOCR	OR	OFF	2004/03/02 12:53
S84	2	438/687,618,633,627,643,687. CCLS. and (((barrier adj (layer or film)) and ((expos\$3 or anneal\$5) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2"))))) and semiconductor) and ((metal adj (layer or film)) same (chemical adj vapor adj deposition))) and (second adj gas) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/03/08 08:00
S85	528	438/687,618,633,627,643,687. CCLS. and ((barrier or diffus\$5) adj (layer or film)) and (expos\$3 or treat\$6) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/03/08 08:03
S86	3489	"438"/\$.CCLS. and ((barrier or diffus\$5) adj (layer or film)) and (expos\$3 or treat\$6) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/03/08 08:03
S87	498	438/687,618,633,627,643,687. CCLS. and (barrier adj (layer or film)) and (expos\$3 or treat\$6) and ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/03/08 08:04
S88	239	438/687,618,633,627,643,687. CCLS. and (barrier adj (layer or film)) and ((expos\$3 or treat\$6) same ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/15 14:40
S89	1	("6475902").PN.	USPAT; USOCR	OR	OFF	2004/03/08 11:14
S90	2	((("6475902") or ("5665659")).PN.	USPAT; USOCR	OR	OFF	2004/07/16 12:19
S91	885	438/687,618,633,627,643,687. CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) same (reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 07:04
S92	260	438/687,618,633,627,643,687. CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 11:07

S93	7	438/687,618,633,627,643,687. CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (hydrogen or ("H.sub. 2")))) and ((free or without or no) adj plasma) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 08:27
S94	13	"438"/\$.CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) with ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and ((free or without or no) adj plasma) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 09:07
S95	15	"257"/\$.CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) with ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and ((free or without or no) adj plasma) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 09:07
S96	18	semiconductor and ((barrier or (diffus\$6 adj prevent\$6)) with ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and ((free or without or no) adj plasma) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 13:25
S97	35	"438"/\$.CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and ((free or without or no) adj plasma) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 09:08
S98	42	"257"/\$.CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and ((free or without or no) adj plasma) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 09:08
S99	51	semiconductor and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and ((free or without or no) adj plasma) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 09:08
S10 0	543	438/687,618,633,627,643,687. CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (nitrogen or ("n.sub.2")) or (hydrogen or ("H.sub.2")))) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 11:09

S10 1	275	438/687,618,633,627,643,687. CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (nitrogen or ("n.sub.2")) or (hydrogen or ("H.sub.2")))) and anneal\$5 and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 11:09
S10 2	275	438/687,618,633,627,643,687. CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (nitrogen or ("n.sub.2")) or (hydrogen or ("H.sub.2")))) and anneal\$5) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 11:10
S10 3	190	"438"/\$.CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) with ((reduc\$3 adj gases) or (nitrogen or ("n.sub.2")) or (hydrogen or ("H. sub.2")))) with anneal\$5) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 11:11
S10 4	686	"438"/\$.CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (nitrogen or ("n.sub.2")) or (hydrogen or ("H. sub.2")))) same anneal\$5) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 11:12
S10 5	938	"257"/\$.CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (nitrogen or ("n.sub.2")) or (hydrogen or ("H. sub.2")))) same anneal\$5) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 11:12
S10 6	256	"257"/\$.CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) with ((reduc\$3 adj gases) or (nitrogen or ("n.sub.2")) or (hydrogen or ("H. sub.2")))) with anneal\$5) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 11:13
S10 7	303	semiconductor and ((barrier or (diffus\$6 adj prevent\$6)) with ((reduc\$3 adj gases) or (nitrogen or ("n.sub.2")) or (hydrogen or ("H. sub.2")))) with anneal\$5) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 11:13
S10 8	1034	semiconductor and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (nitrogen or ("n.sub.2")) or (hydrogen or ("H. sub.2")))) same anneal\$5) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 11:13

S109	144	438/687,618,633,627,643,687. CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (nitrogen or ("n.sub.2"))) or (hydrogen or ("H.sub.2"))) same anneal\$5) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 13:19
S110	0	"20020009872".URPN.	USPAT	OR	ON	2004/07/16 13:48
S111	12	semiconductor and ((barrier or (diffus\$6 adj prevent\$6)) with ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and anneal\$6 and ((free or without or no) adj plasma) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 13:26
S112	32	semiconductor and ((barrier or (diffus\$6 adj prevent\$6)) same ((reduc\$3 adj gases) or (hydrogen or ("H.sub.2")))) and anneal\$6 and ((free or without or no) adj plasma) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 13:26
S113	37	438/687,618,633,627,643,687. CCLS. and ((barrier or (diffus\$6 adj prevent\$6)) with ((reduc\$3 adj gases) or (nitrogen or ("n.sub.2"))) or (hydrogen or ("H.sub.2"))) with anneal\$5) and @ad<="20010417"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/07/16 13:48
S114	8	"6214730"	USPAT	OR	ON	2004/07/16 13:48
S115	1	("6214730").PN.	USPAT; USOCR	OR	OFF	2004/07/21 14:33
S116	1	("6310300").PN.	USPAT; USOCR	OR	OFF	2004/07/16 13:56
S117	1	("6355558").PN.	USPAT; USOCR	OR	OFF	2004/07/16 13:56
S118	6	((("6159857") or ("6350688") or ("20030015793") or ("20030034251") or ("6479340") or ("20020025694"))).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2004/07/22 08:13
S119	5	((("5652156") or ("6160300") or ("jp403055850") or ("de2000030119"))).PN.	USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2001/12/18 07:34
S120	3	("5652156").PN.	USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2001/12/18 12:54
S121	1	((("20020022354") or ("6248633") or ("6303959"))).PN.	US-PGPUB; USOCR	OR	OFF	2003/11/14 16:12

S12 2	1	("6613669").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2003/11/17 06:46
S12 3	5	("5381302" "5504041" "5554866" "5652464" "5739579").PN.	USPAT	OR	ON	2003/11/17 07:12
S12 4	5	("5381302" "5504041" "5554866" "5652464" "5739579").PN.	USPAT	OR	ON	2003/11/17 07:13
S12 5	14	("4676866" "4690730" "4957590" "4976839" "5070036" "5162262" "5175126" "5232871" "5236869" "5240880" "5371042" "5466629" "5514908" "5552341").PN.	USPAT	OR	ON	2003/11/17 07:13
S12 6	3	("4783248" "5049975" "5136362").PN.	USPAT	OR	ON	2003/11/17 07:15
S12 7	1	("5932907").PN.	USPAT; USOCR	OR	OFF	2003/11/17 07:27
S12 8	1	("5920122").PN.	USPAT; USOCR	OR	OFF	2003/11/17 07:17
S12 9	10	("4937657" "5000818" "5049975" "5155063" "5162262" "5231055" "5242860" "5444018" "5455197" "5514908").PN.	USPAT	OR	ON	2003/11/17 07:18
S13 0	2	((("6596607") or ("6566229"))).PN.	USPAT; USOCR	OR	OFF	2004/02/23 09:54
S13 1	2	((("6413852") or ("6140200"))).PN.	USPAT; USOCR	OR	OFF	2004/03/08 12:51
S13 2	2	((("5710407") or ("5487358"))).PN.	USPAT; USOCR	OR	OFF	2004/07/16 12:19